Application No.: 09/762,387   Docket No.: 21900-00020-US

AMENDMENTS TO THE CLAIMS

3.   (Previously Amended) A data transmission control apparatus, comprising a clock processing unit for generating a current time corrected according to an information of a time received from a system controller via a network, a transmitting/receiving processing unit for transmitting and receiving data including compressed image data and control signal with respect to said network, a time designation processing unit for setting a designation time received from said system controller via said network, and a designation time detection processing unit for comparing said preset designation time with said current time, whereby, when said designation time is compared with said current time and these agree with each other, compression to send out I frames is performed and compressed image data of I frame is sent out.

4.   (Original) A data transmission control apparatus, comprising a clock processing unit for generating a current time corrected according to an information of a time received from a system controller via a network, a transmitting/receiving processing unit for transmitting and receiving data and control signal with respect to said network, a time designation processing unit for setting a designation time received from said system controller via said network, and a designation time detection processing unit for comparing said preset designation time with said current time, whereby, when said designation time is compared with said current time and these agree with each other, the received data is switched over.

5.   (Previously Amended) A data transmission control system, comprising

an arbitrary number of data transmission control apparatuses each having a clock processing unit for generating a current time corrected according to an information of a time received from a system controller via a network, a transmitting/receiving processing unit for transmitting and receiving data including compressed image data and control signal with respect to said network, a time designation processing unit for setting a designation time received from said system controller via said network, and a designation time detection processing unit for comparing said preset designation time with said current time, whereby, when said designation time is compared with said current time and these agree with each other, compressed image data of I frame is sent out; and

2

Application No.: 09/762,387   Docket No.: 21900-00020-US

an arbitrary number of data transmission control apparatuses each having a clock
processing unit for generating a current time corrected according to an information of a time
received from a system controller via a network, a transmitting/receiving processing unit for
transmitting and receiving data and control signal with respect to said network, a time
designation processing unit for setting a designation time received from said system controller
via said network, and a designation time detection processing unit for comparing said preset
designation time with said current time, whereby, when said designation time is compared with
said current time and these agree with each other, the received data is switched over;

said data transmission control apparatus being connected with each other over a network,
whereby compressed image data received is switched over at a timing of transmission of an
image data of I frame, which constitutes compressed image on the receiving side.

6.   (Original)   A data transmission control system, for use in a case wherein a plurality of
devices for transmitting and a plurality of devices for receiving compressed image data are
connected with each other over a network, said system being arranged such that when the
compressed image data received on the receiving device is switched over, it is requested to send
out I frame of compressed image data constituting the compressed image to the device for
sending the compressed image data to be received newly, and compressed image data of I frame
is transmitted within the shortest time to the receiving device.

7.   (Canceled).

8.   (Canceled).

9.   (Canceled).

10.   (Original) A transmission control method in data transmission of compressed image
data, comprising the steps of setting a data amount of image data including I frame constituting
the compressed image to a value lower than a transmissible data amount, and providing free time
up to arrival of the next data group.

11.   (Canceled).

12.   (Canceled).

13.   (Original) The data transmission control apparatus according to claim 3, wherein an
information of the designation time is maintained inside in advance.

3

Application No.: 09/762,387   Docket No.: 21900-00020-US

14.   (Original) The data transmission control apparatus according to claim 4, wherein an information of the designation time is maintained inside in advance.

15.   (Previously Added) A data transmission control system, comprising:

a plurality of photographing means each utilizing a data transmission control apparatus, having a clock processing unit for generating a current time corrected according to an information of a time received from a system controller via a network, a transmitting/receiving processing unit for transmitting and receiving data and control signal to and from said network, a time designation processing unit for setting a designation time received from said system controller via said network, and a designation time detection processing unit for comparing said preset designation time with said current time, whereby, as a result of said comparison, the sending of transmission data from external device is stopped by said transmitting/receiving processing unit when the present designation time is detected;

a plurality of monitoring means each utilizing a data transmission control apparatus, having a clock processing unit for generating a current time corrected according to an information of a time received from a system controller via a network, a transmitting/receiving processing unit for transmitting and receiving data and control signal with respect to said network, a time designation processing unit for setting a designation time received from said system controller via said network, and a designation time detection processing unit for comparing said preset designation time with said current time, whereby, when said designation time is compared with said current time and these agree with each other, the received data is switched over; and

a manager connected to a network, to which said plurality of photographing/transmitting means and said plurality of monitoring means are connected, said manager performing scheduling of data transmission between said plurality of photographing/transmitting means and said plurality of monitoring means.

16.   (Currently Amended) A data transmission control system, comprising:

a plurality of photographing means each utilizing a data transmission control apparatus, having a clock processing unit for generating a current time corrected according to an information of a time received from a system controller via a network, a transmitting/receiving processing unit for transmitting and receiving data including compressed image data and control

4

Application No.: 09/762,387   Docket No.: 21900-00020-US

signal with respect to said network, a time designation processing unit for setting a designation time received from said system controller via said network, and a designation time detection processing unit for comparing said preset designation time with said current time, whereby, when said designation time is compared with said current time and these agree with each other, sending out of compressed image data of I frame is ~~sent out~~terminated;

a plurality of monitoring means each utilizing a data transmission control system having an arbitrary number of data transmission control apparatuses each having a clock processing unit for generating a current time corrected according to an information of a time received from a system controller via a network, a transmitting/receiving processing unit for transmitting and receiving data including compressed image data and control signal with respect to said network, a time designation processing unit for setting a designation time received from said system controller via said network, and a designation time detection processing unit for comparing said preset designation time with said current time, whereby, when said designation time is compared with said current time and these agree with each other, compressed image data of I frame is snet out; and an arbitrary number of data transmission control apparatuses each having a clock processing unit for generating a current time corrected according to an information of a time received from a system controller via a network, a transmitting/receiving processing unit for transmitting and receiving data and control signal with respect to said network, a time designation processing unit for setting a designation time received from said system controller via said network, and a designation time detection processing unit for comparing said preset designation time with said current time, whereby, when said designation time is compared with said current time and these agree with each other, the received data is switched over; said data transmission control apparatuses being connected with each other over a network, whereby compressed image data received is switched over a timing of transmission of an image data of I frame, which constitutes compressed image on the receiving side; and

a manager connected to a network, to which said plurality of photographing/transmitting means and said plurality of monitoring means are connected, said manager performing scheduling of data transmission between said plurality of photographing/transmitting means and said plurality of monitoring means.

5

Application No.: 09/762,387   Docket No.: 21900-00020-US

17.   (Previously Added) A data transmission control system, comprising:

a plurality of photographing means each utilizing a data transmission control apparatus, having a-e clock processing unit for generating a current time corrected according to an information of a time received from a system controller via a network, a transmitting/receiving processing unit for transmitting and receiving data including compressed image data and control signal with respect to said network, a time designation processing unit for transmitting and receiving data including compressed image data and control signal with respect to said network, a time designation processing unit for setting a designation time received from said system controller via said network, and a designation time received from said system controller via said network, and a designation time detection processing unit for comparing said preset designation time with said current time, whereby, when said designation time is compared with said current time and these agree with each other, compressed image data of I frame is sent out;

a plurality of monitoring means each utilizing a data transmission control apparatus, having a clock processing unit for generating a current time corrected according to an information of a time received from a system controller via a network, a transmitting/receiving processing unit for transmitting and receiving data and control signal with respect to said network, a time designation processing unit for setting a designation time received from said system controller via said network, and a designation time detection processing unit for comparing said preset designation time with said current time, whereby, when said designation time is compared with said current time and these agree with each other, the received data is switched over; and

a manager connected to a network, to which said plurality of photographing/transmitting means and said plurality of monitoring means are connected, said manager performing scheduling of data transmission between said plurality of photographing/transmitting means and said plurality of monitoring means.

18.   (Previously Added) A data transmission control system, comprising:

a plurality of photographing means each utilizing a data transmission control apparatus, having a a clock processing unit for generating a current time corrected according to an information of a time received from a system controller via a network, a transmitting/receiving processing unit for transmitting and receiving data including compressed image data and control

6

Application No.: 09/762,387   Docket No.: 21900-00020-US

signal with respect to said network, a time designation processing unit for setting a designation time received from said system controller via said network, and a designation time detection processing unit for comparing said preset designation time with said current time, whereby, when said designation time is compared with said current time and these agree with each other, compressed image data of I frame is sent out;

a plurality of monitoring means each utilizing a data transmission control system having an arbitrary number of data transmission control apparatuses each having a clock processing unit for generating a current time corrected according to an information of a time received from a system controller via a network, a transmitting/ receiving processing unit for transmitting and receiving data including compressed image data and control signal with respect to said network, a time designation processing unit for setting a designation time received from said system controller via said network, and a designation time detection processing unit for comparing said preset designation time with said current time, whereby, when said designation time is compared with said current time and these agree with each other, compressed image data of I frame is sent out; and an arbitrary number of data transmission control apparatuses each having a clock processing unit for generating a current time corrected according to an information of a time received from a system controller via a network, a transmitting/receiving processing unit for transmitting and receiving data and control signal with respect to said network, a time designation processing unit for setting a designation time received from said system controller via said network, and a designation time detection processing unit for comparing said preset designation time with said current time, whereby, when said designation time is compared with said current time and these agree with each other, the received data is switched over; said data transmission control apparatuses being connected with each other over a network, whereby compressed image data received is switched over at a timing of transmission of an image data of I frame, which constitutes compressed image on the receiving side; and

a manager connected to a network, to which said plurality of photographing/transmitting means and said plurality of monitoring means are connected, said manager performing scheduling of data transmission between said plurality of photographing/transmitting means and said plurality of monitoring means.

7

Application No.: 09/762,387   Docket No.: 21900-00020-US

19.   (Previously Added) A data transmission control system, comprising:

a plurality of photographing means each utilizing a data transmission control apparatus, for use in a case wherein a plurality of devices for transmitting and a plurality of devices for receiving compressed image data are connected with each other over a network, said system being arranged such that when the compressed image data received on the receiving device is switched over, it is requested to send out I frame of compressed image data constituting the compressed image to the device for sending the compressed image data to be received newly, and compressed image data of frame is transmitted within the shortest time to the receiving device;

a plurality of monitoring means each utilizing a data transmission control apparatus, having a clock processing unit for generating a current time corrected

according to an information of a time received from a system controller via a network, a transmitting/receiving processing unit for transmitting and receiving data and control

signal with respect to said network, a time designation processing unit for setting a designation time received from said system controller via said network, and a designation time detection processing unit for comparing said preset designation time with said current time, whereby, when said designation time is compared with said current time and these agree with each other, the received data is switched over; and

a manager connected to a network, to which said plurality of photographing/transmitting means and said plurality of monitoring means are connected, said manager performing scheduling of data transmission between said plurality of photographing/transmitting means and said plurality of monitoring means.

20.   (Previously Added) A data transmission control system, comprising:

a plurality of photographing means each utilizing a data transmission control apparatus, for use in a case wherein a plurality of devices for transmitting and a plurality of devices for receiving compressed image data are connected with each other

8

Application No.: 09/762,387   Docket No.: 21900-00020-US

over a network, said system being arranged such that when the compressed image data received on the receiving device is switched over, it is requested to send out I frame of compressed image data constituting the compressed image to the device for sending the compressed image data to be received newly, and compressed image data of I frame is transmitted within the shortest time to the receiving device;

a plurality of monitoring means each utilizing a data transmission control system having an arbitrary number of data transmission control apparatuses each having a clock processing unit for generating a current time corrected according to an information of a time received from a system controller via a network, a transmitting/ receiving processing unit for transmitting and receiving data including compressed image data and control signal with respect to said network, a time designation processing unit for setting a designation time received from said system controller via said network, and a designation time detection processing unit for comparing said preset designation time with said current time, whereby, when said designation time is compared with said current time and these agree with each other, compressed image data of I frame is sent out; and an arbitrary number of data transmission control apparatuses each having a clock processing unit for generating a current time corrected according to an information of a time received from a system controller via a network, a transmitting/receiving processing unit for transmitting and receiving data and control signal with respect to said network, a time designation processing unit for setting a designation time received from said system controller via said network, and a designation time detection processing unit for comparing said preset designation time with said current time, whereby, when said designation time is compared with said current time and these agree with each other, the received data is switched over; said data transmission control apparatuses connected with each other over a network, whereby compressed image data received is switched over at a timing of transmission of an image data of I frame, which constitutes compressed image on the receiving side; and

a manager connected to a network, to which said plurality of photographing/transmitting means and said plurality of monitoring means are connected, said manager performing

9

Application No.: 09/762,387   Docket No.: 21900-00020-US

scheduling of data transmission between said plurality of photographing/transmitting means and said plurality of monitoring means.

21.   (Previously Added) The data transmission control system according to claim 15, wherein, in the scheduling by said manager, the sending of I frame of compressed image data is thinned out.

22.   (Previously Added) The data transmission control system according to claim 16, wherein, in the scheduling by said manager, the sending of I frame of compressed image data is thinned out.

23.   (Previously Added) The data transmission control system according to claim 17, wherein, in the scheduling by said manager, the sending of I frame of compressed image data is thinned out.

24.   (Previously Added) The data transmission control system according to claim 18, wherein, in the scheduling by said manager, the sending of I frame of compressed image data is thinned out.

25.   (Previously Added) The data transmission control system according to claim 19, wherein, in the scheduling by said manager, the sending of I frame of compressed image data is thinned out.

26   (Previously Added) The data transmission control system 25 according to claim 20, wherein, in the scheduling by said manager, the sending of I frame of compressed image data is thinned out.

10